



Division Waste Management and Radiation Control



**WASTE MANAGEMENT
& RADIATION CONTROL**

USED OIL PROCESSOR PERMIT

Permittee Name: Rock Canyon Oil, LLC

Permittee Mailing Address: 1669 South 580 East
American Fork, UT 84003

Permittee Phone Number: (801) 756-2000

Permittee Contact: **Gary Maxwell**
General Manager
(801) 420-1640 (cell)
Email: gary@rockcanyonoil.com

Facility Address: 1669 South 580 East
American Fork, UT 84003

Facility Contact: **Gary Maxwell**
General Manager
(801) 420-1640 (cell)
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Type of Permit: Used Oil Processor Permit

Permit #: UOP-0122

Original Issue Date: January 10, 2011

EPA ID #: UTR000010454

Signature: _____ Date: _____

~~Scott T. Anderson~~ Ty L. Howard, Director
Division of Waste Management and Radiation Control

I.A. Effect of Permit

- I.A.1. Rock Canyon Oil, LLC. (hereafter referred to as “Permittee”) is hereby authorized to operate as a Used Oil Processor located at 1669 South 580 East, American Fork, Utah (Attachment 1 – Facility Site Plan Map) in accordance with all applicable requirements of R315-15 of the Utah Administrative Code (UAC) and of the Used Oil Management Act (the Act) 19-6-701 et. seq., Utah Code Annotated and this Permit.
- I.A.2. This permit shall be effective for a term not to exceed ten years in accordance with the requirements of R315-15-15 of the Utah Administrative Code.
- I.A.3. Attachments incorporated by reference are enforceable conditions of this Permit, as are documents incorporated by reference into the attachments. Language in Conditions I and II supersedes any conflicting language in the attachments or documents incorporated into the attachments.
- I.A.4. It shall not constitute a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the Permittee’s business activity in order to maintain compliance with the conditions of this Permit and its attachments.

I.B. Permit Revocation

- I.B.1. Violation of any permit condition or failure to comply with any applicable provision of the applicable statutes and rules shall be grounds for enforcement actions, including revocation of this Permit. The Director shall notify the Permittee in writing of his intent to revoke this Permit.

I.C. Permit Modification

- I.C.1. The Permittee may request modifications to any item or operational activity covered by this Permit by submitting a written permit modification request to the Director. If the Director determines the modification request is substantive, a public hearing, a 15-day public comment period or both may be required before a decision by the Director on the modification request. Implementing a modification prior to the Director’s written approval constitutes a violation of this Permit and may be grounds for enforcement action or permit revocation.
- I.C.2. Changes in operational activities include any expansion of the facility beyond the areas designated, alteration of processing equipment or operational parameters, changes in the type or number of storage tanks, piping, other equipment and changes to the contingency plan.
- I.C.3. The Director may require the Permittee to submit additional information when reviewing permit modification requests to ensure the safe handling of used oil at the processing facility in accordance with Section 19-6-710(3)(b)(xii) Utah Code Annotated.
- I.C.4. The Director may modify this Permit as necessary to protect human health and the environment or because of statutory or regulatory changes.

I.C.5. The Permittee shall notify the Director, in writing, of any non-substantive changes, such as changes in the contact person, within 20 days of the change.

I.D. Emergency Controls and Contingency Plan

I.D.1. The Permittee shall take all reasonable steps to minimize releases to the environment and shall carry out such measures as are necessary to protect human health and the environment. In the event of a release of used oil, the Permittee shall immediately take appropriate actions in accordance with the Permittee's Emergency Controls and Contingency Plan (Attachment 3), and R315-15-9 ~~of the Utah Administrative Code~~ UAC.

I.D.2. The Permittee shall keep a current copy and all revisions of the Emergency Controls and Contingency Plan (Attachment 3) on site until facility closure.

I.D.3. The Permittee shall provide a current copy to local police, fire departments, hospitals and State local emergency response teams that may be called upon during an emergency in accordance with R315-15-5.3(b)(3) ~~of the Utah Administrative Code~~ UAC.

I.D.4. The Permittee shall implement the Contingency Plan whenever there is an imminent or an actual emergency.

I.D.5. The Permittee shall notify the Utah Department of Environmental Quality's 24-hour Answering Service, (801) 536-4123, for used oil releases exceeding 25 gallons or for smaller releases that pose a potential threat to human health or the environment in accordance with R315-15-9.1 ~~of the Utah Administrative Code~~ UAC. The Permittee shall provide the information required by R315-15-9.1(c) ~~of the Utah Administrative Code~~ UAC.

I.D.6. In accordance with R315-15-9.4 ~~of the Utah Administrative Code~~ UAC, the Permittee shall submit to the Director a written report within 15 days of any reportable release of used oil. The report shall also include a description of actions taken by the Permittee to prevent future spills.

I.E. Facility Equipment, Maintenance and Secondary Containment

I.E.1 The Permittee shall maintain and operate the processing facility to minimize the possibility of fire, explosion or sudden or non-sudden release of used oil to air, ground, soil, surface and groundwater and sewer systems that could threaten human health and the environment.

I.E.2. The Permittee shall maintain tanks, containers, associated piping, pumps and valves in good operational condition.

I.E.3. The Permittee shall have communication systems, fire alarms and fire suppression equipment in place and operational at the facility, as well as arrangements with local emergency response teams (i.e. fire, police and hospital) in accordance with R315-15-5.3 ~~of the Utah Administrative Code~~ UAC.

- I.E.4. The Permittee shall have written documentation of inspections, conducted weekly, of used oil equipment, secondary containment, containers, tanks, fire suppression systems (portable and fixed) and testing of emergency alarms for fire and emergency communication systems in accordance with Attachment 2 (Safety, Security and Inspection Forms).
- I.E.5. Inspection documents shall include inspector's name, date, areas inspected, any problems found, and the subsequent actions taken by the facility to maintain system integrity.
- I.E.6. The Permittee shall secure the facility, lock the entrance security gate and maintain adequate perimeter fencing to prevent access by unauthorized persons or vehicles during hours when the facility is closed and the Permittee's authorized personnel are not present.
- I.E.7. The Permittee shall maintain spill kits and fire extinguishers as specified in Attachment 3 (Emergency Controls and Contingency Plan). The Facility Site Plan Map (Attachment 1) shows the location of the spill kits, fire extinguishers, used oil storage areas and other emergency equipment.
- I.E.8. The Permittee shall construct and maintain a secondary containment system for used oil containers, tanks, piping and other ancillary processing tanks and equipment in accordance with R315-15-5.5(c) ~~of the Utah Administrative Code~~ UAC. The joints between the concrete floor, containment walls and the tank pads shall be sealed to prevent migration of oil to the soil and groundwater. Any alterations or additions to the secondary containment system must be approval by the Director before changes are implemented.
- I.E.8.1 The truck loading/unloading area shall be constructed of concrete and graded to drain all spills and runoff into the above-ground storage tank containment area.
- I.E.9. Used oil, water or other liquids that may accumulate in the secondary containment system or any ancillary facility sumps shall be removed within 24 hours of discovery to prevent the possible migration to soil, ground, or surface waters.
- I.F. Record Keeping Requirements and Retention**
- I.F.1. The Permittee shall maintain all used oil records required by R315-15 ~~of the Utah Administrative Code~~ UAC and this Permit at the Permittee's processing facility located at located at 1669 South 580 East in American Fork, Utah.
- I.F.2. Records may be in hard copy or in an electronic format and shall be readily accessible for inspection by authorized representatives of the Director. The Permittee shall maintain, for a minimum of three years, all applicable used oil records (e.g. required by R315-15 ~~of the Utah Administrative Code~~ UAC and this Permit, ~~with the exception of~~ except for the facility operating record, which the Permittee shall maintain until facility closure.
- I.F.3. The Permittee shall maintain other records (e.g. training and financial assurance) required by R315-15 of the Utah Administration Code and this Permit.

I.F.4. The Permittee shall maintain the following written (or electronic) tracking records that document used oil operations conducted at this processing facility:

I.F.4.a. Records of used oil accepted at the facility or shipped from the facility in accordance with the requirements of R315-15-5.7(a) and R315-15-5.7(b), respectively, ~~of the Utah Administrative Code~~ UAC.

I.F.4.b. Used oil storage tank records (bulk storage) that document the date, time, operator (initials), and volume of the used oil deposited into each tank and the date, time, operator (initials), and destination of the used oil removed from each tank (including inter-tank transfers).

I.F.4.c. An inventory of used oil containers (with volumes) that are stored in the facility's drum storage area (Attachment 1-Facility Site Plan Map).

I.G. Operating Record

I.G.1. The Permittee shall maintain an operating record (paper or electronic) until final closure of the facility that contains the following information:

I.G.1.a. Documentation of all used oil analytical testing (sampling methods and analytical results) conducted to comply with the analytical requirements of R315-15-5.6 ~~of the Utah Administrative Code~~ UAC and this Permit Code and this Permit.

I.G.1.b. Used oil-processing records in accordance with the requirements of R315-15.5 and this Permit.

I.G.1.c. Summary reports and details of all incidents that require implementation of the Emergency Controls and Contingency Plan (Attachment 3).

I.G.1.d. Records of the mass balance of wastewater entering, leaving or that was processed (e.g. water vapor vented to the atmosphere from processing of the oil) at the facility. This includes wastewater discharge records, if applicable. This does not include water used in non-contact cooling processes.

I.H. Sampling and Analysis Plan

I.H.1. The Permittee shall follow all sampling and analytical procedures in Condition II.N and Attachments 5 (Sample Collection Procedures) and 6 (Analysis Plan) when conducting used oil sampling and analytical testing to meet the requirements of R315-15-5.6 ~~of the Utah Administrative Code~~ UAC and this Permit.

I.I. Prohibitions

I.I.1. Used shall only be stored in tanks, containers or units subject to regulations under R315-265 or R315-264 ~~of the Utah Administrative Code~~ UAC.

I.I.2. The Permittee shall not manage used oil in surface impoundments or waste piles.

I.I.3. The Permittee shall not place, manage, discard or otherwise dispose of used oil in any manner specified in R315-15-1.3 ~~of the Utah Administrative Code~~ UAC.

- I.I.4. Used oil that has been mixed with hazardous waste as defined by R315-261 ~~of the Utah Administrative Code~~UAC or PCBs as defined by R315-301-2(53) ~~of the Utah Administrative Code~~UAC shall no longer be managed as used oil and shall be subject to the rules applicable to hazardous waste and PCB-contaminated waste.
- I.I.5. Used oil shall not be stored in containers; tanks or piping that have previously stored hazardous waste, unless the tanks, containers and piping have been cleaned in accordance with R315-261-7 ~~of the Utah Administrative Code~~UAC.
- I.I.6. The Permittee shall not accept used oil for storage with a PCB concentration greater than 2 mg/kg (ppm).
- I.I.7. The Permittee shall manage used oil with PCB concentrations of greater than or equal to 2 mg/kg but less than 50 mg/kg in accordance with R315-15-18 ~~of the Utah Administrative Code~~UAC.
- I.I.8. The Permittee shall not dilute used oil to avoid any provision of any Federal or State environmental regulation.
- I.I.9. Used oil shall not be stored in tanks, containers or associated piping that have previously stored PCB contaminated materials at or above 50 mg/kg (ppm), unless the tanks, containers and piping or storage units have been decontaminated as described in 40 CFR 761 Subpart S.
- I.I.10. Mixtures of used oil and PCB-contaminated material shall be managed in accordance with R315-15-18 ~~of the Utah Administrative Code~~UAC and 40 CFR 761 Subpart S.
- I.J. Waste Characterization and Disposal**
- I.J.1. The Permittee shall document and maintain records showing proper characterization, handling and disposal for used oil related wastes, including oily wastewater sent off site for disposal (if applicable) for a minimum of three years.
- I.J.2. The Permittee shall properly characterize and dispose of used oil related wastes to determine if the wastes are hazardous or non-hazardous in accordance with R315-261 and R315-15-8 ~~of the Utah Administrative Code~~UAC.
- I.J.3. The Permittee shall notify the Director within 24 hours of any used oil found with a PCB concentration greater than or equal to 2 mg/kg (ppm).
- I.K. Liability and Financial Assurance Requirements**
- I.K.1. The Permittee shall be financially responsible for cleanup and closure costs, general liabilities and environmental pollution legal liability for bodily or property damage to third parties resulting from sudden release of use oil in accordance with R315-15-10 through 12 ~~of the Utah Administrative Code~~UAC and this Permit.
- I.K.2. The Permittee shall provide documentation of financial responsibility for cleanup and closure, environmental pollution legal liability and general liability coverage annually to the Director for review and approval by March 1 of each reporting year or upon request by the Director.

I.K.3. The Permittee shall receive written approval from the Director for any changes in the extent, type (e.g., mechanism, insurance carrier or financial institution), or amount of the environmental pollution legal liability due to physical or operational changes at the facility prior to implementation of these changes.

I.L. Cleanup and Closure Plan

I.L.1. The Permittee shall update its closure plan cost estimates and provide the updated estimate to the Director, in writing, within 60 days following a facility modification that causes an increase in the financial responsibility required under R315-15-10 ~~of the Utah Administrative Code~~ UAC. Within 30 days of the Director's written approval, the owner or operator shall provide to the Director the information specified in R315-15-11.2(b)(2) ~~of the Utah Administrative Code~~ UAC and Condition II.P of this Permit.

I.L.2. The Permittee shall initiate closure of the facility within 90 days after the Permittee receives the final volume of used oil or after the Director revokes the Permittee's Processor Permit in accordance with the requirements of R315-15-11.3 ~~of the Utah Administrative Code~~ UAC and this Permit.

I.L.3. The Permittee shall remove or decontaminate used oil residues in tanks, containment system, and the environment in accordance R315-15-5.5(f) ~~of the Utah Administrative Code~~ UAC and the Closure Plan, Attachment 8.

I.L.4. Within 60 days of completion of cleanup and closure, the Permittee shall submit to the Director, by registered mail, a certification that the facility has been closed in accordance with R315-15-11.4 ~~of the Utah Administrative Code~~ UAC and the specifications of the approved cleanup and closure plan. An independent, Utah-registered professional engineer and the Permittee shall sign the closure certification.

I.L.5. Additional sampling and remediation may be required by the Director to verify that cleanup and closure has been completed according to R315-15 ~~of the Utah Administrative Code~~ UAC.

I.M. Used Oil Handler Certificate

I.M.1. In accordance with R315-15-5.9 ~~of the Utah Administrative Code~~ UAC, the Permittee shall not operate as a used oil processor without obtaining annually a Used Oil Handler Certificate from the Director. The Permittee shall pay a used oil handler fee, pursuant to Utah Administrative Code Annotated Condition 63J-1-504, by December 31 of each calendar year to receive certification for the upcoming calendar year.

I.N. Inspection and Inspection Access

I.N.1. Any duly authorized employee of the Director may, at any reasonable time and upon presentation of credentials, have access to and the right to copy any records relating to used oil and to inspect, audit or sample. The employee may also make record of the inspection by photographic, electronic, audio, video or any other reasonable means to determine compliance.

I.N.2. The authorized employees may collect soil, groundwater or surface water samples to evaluate the Permittee's compliance.

I.N.3. Failure to allow reasonable access to the property by authorized employees is a “denial of access” and may be grounds for enforcement action or permit revocation.

I.O. Annual Report

I.O.1. As required by R315-15-13.5 ~~of the Utah Administrative Code~~ UAC, the Permittee shall prepare and submit an Annual Report to the Director by March 1 of the following year. The Annual Report shall describe the Permittee’s used oil activities in Utah and document financial assurance using the Division’s Processor Annual Report form.

I.P. Other Laws

I.P.1. Nothing in this permit shall be construed to relieve the Permittee of his obligation to comply with any Federal, State, or local law.

I.Q. Enforceability

I.Q.1. Violations documented through the enforcement process pursuant to Utah Code Annotated 19-6-112 may result in penalties assessed in accordance with R315-102 ~~of the Utah Administrative Code~~ UAC.

I.R. Effective Date

I.R.1. The permit is effective on the date of signature by the Director.

Draft Permit for Public Comment

II.A. General Operations

- II.A.1. The Permittee is authorized to store and ~~re-refine process~~ used oil; ~~via gravity separation, clay filtration, vacuum distillation and blending~~ in accordance with R315-15-5 ~~of the Utah Administrative Code~~ UAC at 1669 South 580 East, American Fork, Utah. The Permittee may market the used oil as either as fuel or as a lubricant. The Permittee operates a separate business, at this location, that blends, and markets industrial base lubricants not regulated under R315-15 of the Utah Administration Code at this facility.
- II.A.2. The Permittee has authorization to store up to ~~871,093~~ 835,840 gallons of used oil in tanks, containers and in associated processing equipment (includes used oil filters) (Attachment 1 - Facility Site Plan Map).
- II.A.3. The Permittee may only accept used oil from a Utah-permitted used oil transporter or deliveries of exempted oily wastewater from waste haulers that maintain all required permits or registrations with the State, counties or municipalities.
- II.A.4. The Permittee shall maintain a current process and instrument diagram (PID), certified by a Utah professional engineer (Attachment 4 – Process and Instrument Diagram).
- II.A.5. The Permittee shall verify, at the time of acceptance, that the transporter delivering the used oil has recorded the halogen content of the used oil on the shipping documents.
- II.A.6. The Permittee is not required to test used oil from a Utah-registered used oil marketer if the marketer provides, at the time of acceptance, analytical data results documenting that the used oil meets the specification requirements of R315-15-1.2 ~~of the Utah Administrative Code~~ UAC.
- II.A.7. If the transporter has not documented the halogen content on the shipping records, then the Permittee shall determine the halogen content of the shipment of used oil received at the facility, prior to acceptance.
- II.A.8. The Permittee shall determine the halogen content by collecting a representative sample in accordance with Condition II.N and Attachment 5 (Sample Collection Procedures) and by screening the used oil sample for halogens or by submitting the sample to a Utah-certified laboratory for analysis in accordance with the analytical requirements of Attachment 6 (Analysis Plan).
- II.A.8.a. The Permittee shall then record the results of the halogen testing of any untested used oil received at the facility in the facility operating record.
- II.A.9. The Permittee shall only deliver shipments of used oil to transporters with a valid Utah Used Oil Transporter Permit issued by the Director.
- II.A.10. The Permittee shall manage used oil recovered from oily water as used oil in accordance with R315-15 ~~of the Utah Administrative Code~~ UAC and this Permit.
- II.A.11. The Permittee shall not accept, or store used oil with PCB concentrations greater than or equal to 2 mg/kg (ppm) without prior written approval from the Director.

- II.A.12. The Permittee shall label used oil storage tanks, drums/containers, or piping (if applicable) with the words “Used Oil.”
- II.A.13. The Permittee shall keep drums and containers of used oil closed except while removing or adding used oil.

II.B. Incoming Used Oil Storage Areas and Tanks

II.B.1. The Permittee is only allowed to store incoming used oil, oily water, and oil filters in specific areas of the facility in tanks/containers listed in ~~shall store un-processed incoming used oil, accepted from used oil transporters, in the tanks/container and storage areas specified in~~ Table II.B.1.

Table II.B.1: Storage Tanks and Container Storage

<u>Tank No.</u>	<u>Capacity (gallon)</u>	<u>Type of Tank</u>	<u>Description/Location</u>
<u>101</u>	<u>22,500</u>	<u>Steel-Vertical</u>	<u>Incoming Oil Storage Tank Farm</u>
<u>102</u>	<u>30,000</u>	<u>Steel-Vertical</u>	<u>Incoming Oil Storage/Tank Farm</u>
<u>104</u>	<u>22,500</u>	<u>Steel-Vertical</u>	<u>Incoming Oil Storage/Tank Farm</u>
<u>107</u>	<u>110,000</u>	<u>Steel-Vertical</u>	<u>Incoming Oil Storage/Process Feed/Tank Farm</u>
<u>108</u>	<u>145,000</u>	<u>Steel-Vertical</u>	<u>Incoming Used Oil Storage and Processing Feed Tank/Tank Farm</u>
<u>109</u>	<u>145,000</u>	<u>Steel-Vertical</u>	<u>Incoming Oil Storage/Process Feed Tank/Tank Farm</u>
<u>115</u>	<u>110,000</u>	<u>Steel-Vertical</u>	<u>Oily Water (> 5% water) Storage (includes incoming oil water and oily water generated at the facility)</u>
<u>119</u>	<u>20,000</u>	<u>Steel-Vertical</u>	<u>Fresh water used as a coolant</u>
<u>Drums/Totes/Bins</u>	<u>2,000</u>	<u>Poly/Steel</u>	<u>Non-bulk containers of used oil and oil filters (drained and non-drained)/Concrete Pad along the South and East edge of the Tank Farm and in a containment area located immediately adjacent to the northern wall of the processing building.</u>
<u>Used Oil Filter Crusher (OFC)</u>	<u>60</u>	<u>Metal</u>	<u>Oil catchment basin on crusher</u>

Table II.B: Incoming Used Oil Storage Tanks and Container Storage Areas

<u>Tank</u>	<u>Capacity (gallon)</u>	<u>Type Tank</u>	<u>Tank Storage Description/Location</u>
<u>101</u>	<u>22,500</u>	<u>Steel Tank</u>	<u>Incoming Used Oil Storage/Tank Farm Secondary Containment (Tank Farm)</u>
<u>102</u>	<u>30,000</u>	<u>Steel Tank</u>	<u>Incoming Used Oil Storage/Tank Farm</u>

104	22,500	Steel Tank	Incoming Used Oil Storage/Tank Farm
107	110,000	Steel Tank	Incoming Used Oil Storage and On-specification Used Oil Processing Feed Tank/Tank Farm
108	145,000	Steel Tank	Incoming Used Oil Storage and Processing Feed Tank/Tank Farm
109	145,000	Steel Tank	Incoming Used Oil Storage and Processing Feed Tank/Tank Farm
110	9,500	Steel Tank	Incoming Used Oil Storage/Tank Farm
111	9,500	Steel Tank	Incoming Used Oil Storage/Tank Farm
112	11,500	Steel Tank	Incoming Used Oil Storage/Tank Farm
113	11,500	Steel Tank	Incoming Used Oil Storage/Tank Farm
Used Oil Container Storage Areas	2,000	Plastic/Steel Containers	Non-bulk containers (less than 350 gallons) of used oil and used oil filters (drained and non-drained)/Unloading Loading Areas South & East of Tank Farm
Used Oil Filter Crusher	60	Metal	Used Oil Filter Crusher - Extracts Oil and cubes the metal for recycle.

II.B.2. The Permittee shall determine ~~that the used oil in the processing feed storage in process feed oil tanks 107, 108 and 109 has met the~~ meets the used oil specification requirements of R315-15-1.2 UAC prior to transferring ~~this used oil~~ into reactor vessel R202 in accordance with the sampling and analytical requirements of this Permit, the facilities used oil processing tanks. The Permittee shall adhere to the specific tank sampling procedures for processing feed tanks #107, 108 and #109 in Attachment 5 (Sample Collection Procedures).

H.B.3. ~~The Permittee shall not process used oil that fails to meet the used oil specification requirements of R315-15-1.2.~~

II.C. ~~Used Oil Processing Tanks and Auxiliary Equipment~~

II.C.1. ~~The Permittee shall only use the specific equipment (primary) listed in Table II.C.1 to process used oil at the facility. The Permittee shall store process cooling water, oily water, processed used oil (oil) in tanks/vessels and auxiliary equipment specified in Table II.C.~~

Table II.C: Processing ~~Tanks/~~ Vessels and Auxiliary Equipment

<u>Processing Equipment</u>	<u>Capacity (gal.)</u>	<u>Description and Location</u>
<u>R202</u>	<u>6,000*</u>	<u>Atmospheric Distillation Vessel - horizontal steel reactor vessel located in the used oil processing building (UOP).</u>
<u>R201</u>	<u>6,000*</u>	<u>Atmospheric Distillation Vessel - horizontal steel reactor vessel located in the UOP.</u>

<u>-Used Oil Heater (UOH)</u>	<u>NA</u>	<u>A natural gas-fired oil heater located outside along the north wall of the UOP that is used to circulate and heat the oil in reactor vessel R201.</u>
<u>Oil Vapor Condenser (OVC)</u>	<u>40</u>	<u>A vapor-liquid separator for gas vapors generated in distillation vessel R201 located in the UOP.</u>
<u>Wiped Film Evaporator (WFE)</u>	<u>NA</u>	<u>Vacuum Distillation Unit located in the UOP</u>
<u>Hot Oil Heater (HOH)</u>	<u>75</u>	<u>An oil heater that provides an indirect heat source for the WFE located in the UOP.</u>
<u>WFE1</u>	<u>265</u>	<u>WFE Distillate Tank Located in the UOP</u>
<u>Combustor Knock-Out Tank (CKT)</u>	<u>500</u>	<u>The CKT is vapor- liquid separator used to “knock out” distilled oil in the gas vapors generated in R201 and the WFE located upstream of the VC. The oil “knocked out” in the CKT is pumped into tank 120.</u>
<u>Vapor Combustor (VC)</u>	<u>NA</u>	<u>A gas-fired combustor located immediately west of the tank farm used to burn gas vapors generated in distillation vessels R201, R202 and the WFE</u>
<u>Vapor Lines R1, R2 and R3</u>	<u>NA</u>	<ul style="list-style-type: none"> • <u>Vapor Line R1: Vapor line carries off-gas vapors generated in R201 and the WFE to the VC for burning.</u> • <u>Vapor Line R2: Water vapor line carries vapors generated in R202 and the WFE to the VC for burning.</u> • <u>Vapor Line R3: Vapors generated during the burn down clay cleaning cycle in the GCF.</u>
<u>Finishing Clay Filtration System (FCF)</u>	<u>900</u>	<u>The Granular Clay Filtration (GCF) and the Rotary Drum Clay Filtration Systems (RDCF) are sometimes used to filter impurities in the processed oil.</u>
<u>* Maximum Volume Operating Capacity</u>		

Table H.C: Facility Used Oil Processing Tanks/Vessels and Auxiliary Equipment

Tank/Auxiliary Equipment	Capacity (gallon)	Tank/ Auxiliary Equipment Description/Location
<u>Feed Preheater (FPH)</u>	<u>NA</u>	<u>The gas fired feed preheater (FPH) that heats the feed oil flowing into vessel #R201. The FPH also utilizes off gas vapors from vessel #R201 as a secondary fuel. The FPH is located along the exterior of the north wall of the Used Oil Processing Bldg. (UOP Bldg.).</u>
<u>Oil Vapor Condenser (OVC)</u>	<u>40</u>	<u>Condenses the off-gas vapor flowing from vessel #R201.</u>
<u>Vapor Combustor (VC)</u>	<u>NA</u>	<u>The VC is a gas-fired combustor used as a backup system to burn off-gas vapors generated from vessel #R201 if the FPH is not operational. The VC is located next to the west edge of the tank farm.</u>

Combustor Knock-Out Tank (CKT)	500	Knocks out any liquids in vapors sent to the VC for burning. Liquids are then sent to the Oil/Water Centrifuge
Wiped Film Evaporator (WFE)	1	Wiped Film Evaporator (WFE) is a distillation system that separates volatile and less volatile components in the oil.
Hot Oil Heater (HOH)	75	Hot Oil Heater (HOH) is a surge tank which is the indirect heat source for WFE/UOP Bldg.
Cooling Water Supply Tank (CWS)	4,000	Cooling Water Tank supplies cooling water (fresh) to the WFE/Adjacent to the outside North wall of the UOP Bldg.
Rotary Clay Filtration Mixing Vessel	900	Mixing tank for Rotary Clay Filtration process (plastic) Along western perimeter of Tank Farm
Finishing Clay Filtration Unit	2	Small clay filter used to remove contaminants from used oil processed in the facility/Tank Farm
Oil/Water Centrifuge Oil Tank	250	Temporary storage for used oil from oil/water separator/Tank Farm
WFE1	265	WFE Distillate Tank/Used Oil Processing Building (UOP Bldg.)
Tank/Auxiliary Equipment (cont.)	Capacity (gallon)	Tank/ Auxiliary Equipment Description/Location
118	2,000	Water/Oily Water Storage Tank for use as VC cooling water/ Tank Farm
119	20,000	Oily water storage tank used for the cooling of processing equipment/ Tank Farm
R201	3,000*	Used Oil Reactor Tank/Vessel/ UOP Bldg.
* Maximum Volume Operating Capacity		

II.D. Processed On-Specification Used Oil Storage Tanks

II.D.1. The Permittee shall only store uses oil processed in the facility in the tanks specified in Table II.D.

Table II.D: Processed On-Specification/Product Used Oil Storage Tanks

Tank No.	Capacity (gallon)	Type Tank	Tank Description/ Location
115	110,000	Steel	Processed Used Oil Storage/Tank Farm
116	40,000	Steel	Processed Used Oil Storage/Tank Farm
117	145,000	Steel	Processed Used Oil Storage/Tank Farm
120	30,000	Steel	Processed Used Oil Storage/Tank Farm

II.E. Base-Oil Lubricant or Distillation Bottoms Tanks (Not Regulated Under R315-15)

II.E.1. The Permittee shall adhere to the following conditions to protect the human health and the environment in case of an emergency at the facility for the storage tanks identified in Table II.E that are located within the Permittee’s used oil tank farm and processing building and that are not regulated under R315-15 ~~of the Utah Administrative Code~~ UAC.

Table II.E: Base-Oil Lubricate Tanks and Distillation Bottoms

Tank No.	Maximum Capacity (gallon)	Tank Use
WFE2	160	Distillation bottoms s marketed as feedstock. Used oil re-refining distillation bottoms marketed as feedstock to manufacture asphalt products not subject to regulation under R315-15
103	30,000	Base-oil lubricants not subject to regulation under R315-15
106	6,700	Base-oil lubricants oil not subject to regulation under R315-15
110	9,500	Distillation bottoms marketed as feedstock
111	9,500	Distillation bottoms marketed as feedstock
112	11,500	Distillation bottoms marketed as feedstock
113	11,500	Distillation bottoms marketed as feedstock
114	30,000	Used oil re-refining distillation bottoms marketed as feedstock to manufacture asphalt products not subject to regulation under R315-15

II.E.2. The Permittee’s tanks 103 and 106 that stores base lubricant oils may be leased to another company or operated by the Permittee. Base oil lubricants may only be stored in tanks identified in Table II.E.H.E.3. Used oil process and storage tanks or other auxiliary processing equipment regulated under R315-15 of the Utah Administration Code shall not have direct connections, via piping, with base-oil lubricant tanks 103 and 106. Tanks 110, 111, 112, 113, and -114 and WFE 2 are exempt from this requirement as they store distillation bottoms generated from used oil processing operations.

- II.E.3. The Permittee shall submit to the Director, within 20 days of the changes, a request to modify this Permit to update the information in Table II.E, Attachment 1 (Facility Diagram) and Attachment 4 (Piping and Instrument Diagram).
- II.E.4. The Permittee shall inspect base-oil lubricant tanks in accordance with the requirements of Permit Condition I.I.1 prior to their use.

II.F. Three Stage Distillation Process System Description

- II.F.1. The distillation process is a three-staged process that utilizes both atmospheric and vacuum distillation techniques to re-refine the used oil. The primary equipment used to process the oil is the Wiped Film Evaporator (WFE) and reactor tanks/vessels R201 and R202 which are in the UOP building. Additional auxiliary processing equipment such as heat exchangers, an oil vapor condenser and pumps are also located in the processing building.
- II.F.2. The first stage is an atmospheric distillation process that occurs in reactor vessel R202. The feed stock oil (oil) is heated to a maximum temperature of 270° F. This distillation stage dewateres the oil and vaporizes any light-end hydrocarbon contaminants such as gasoline or solvents contained in the oil. The oil in the vessel is heated by hot combustion gases that flow through a direct gas-fired u-shaped heater/burner (R202 heater) tube (24" diameter) inside the vessel (near the bottom). A mechanical mixer in the vessel circulates the oil to assure that the oil is evenly heated. The vapors generated in R202 are burned in the facility's gas-fired Vapor Combustor before being vented to the atmosphere. The heated oil in vessel R202 flows (continuous feed) into reactor vessel R201, for the second stage of the distillation process.
- II.F.3. The second stage is an atmospheric distillation process that occurs in vessel R201. The oil in R201 is heated (maximum temperature 550° F) as it circulates through the Used Oil Heater (UOH) located outside of the UOP building. The off-gas vapors generated in R201 flow through an oil vapor condenser (OVC) prior to being burned in the Vapor Combustor. The oil condensed from gas vapors generated in R201 is transferred into storage tank 120. The heated oil in R201 then flows into the Wipe Film Evaporator for further distillation.
- II.F.4. The third state of the distillation process occurs in the Wiped Film Evaporator (WFE) which further refines the oil using a vacuum distillation process. The oil in the WFE is heated (maximum temperature 680°) by the Hot Oil Heater (HOH), located in the UOP building. Gas vapors generated in the WFE are burned in the Vapor Combustor before being vented to the atmosphere. The oil that is condensed in the WFE flows into tank WFE1 and then is transferred into storage tank 117. The oil in tank 117 may be filtered through a clay filtration system (RCF) prior loading into transport vehicles for shipment.
- II.F.5. The heavier oil distillation bottoms, generated during oil distillation in the WFE, drain into tank WFE2 and are then transferred into one of distillation bottom tanks 110, 111, 112, 113, or 114. The Permittee markets these distillation bottoms as feedstock to manufacture asphalt products and thus the distillation bottoms in tanks 110, 111, 112,

113, and 114 are not subject to the regulatory requirements of R315-15 UAC.

II.F.6. At start-up of the processing system, valve V102 shall remain closed until the vapor pressure in gas Vapor Line R1 is equal to or exceeds 1.0 psi. Vapor Line R2 valve V103 shall remained closed during start-up and shutdown of processing system.

II.F.7. The gas vapors generated during the processing of used oil shall be burned in the Vapor Combustor at operating temperatures $\geq 1000^{\circ}$ F and $\leq 1750^{\circ}$ F.

II.F. — Wiped Film Evaporation Distillation Processing System

~~II.F.1. — The primary processing equipment, located in the processing building, used in the vacuum distillation process consists of reactor tank/vessel #R201 that operates as a first stage evaporation vessel and the Wiped Film Evaporator (WFE), both of which are located in the processing building. Additional auxiliary processing equipment such as heat exchangers, an oil vapor condenser and pumps are also located in the processing building.~~

II.G. — Description and Operation of Tank/Vessel #R201

~~II.G.1. — Pump #104 supplies feedstock oil (on specification oil) from tanks #107, #108 and #109. The oil flows through a feed/distillation bottoms heat exchanger, a product condenser, then through the Feed Preheater (FPH) to raise the oil's temperature prior to transfer into the first stage evaporation tank/vessel #R201.~~

~~II.G.1.a. — The Plant Processing Computer (PPC) System allows the operators to control the feed rate into vessel #R201 and will automatically shut down pump #104 when specific operating parameters are exceeded.~~

~~II.G.2. — Vessel #R201 shall have pressure and temperature sensors/gauges connected to the main Plant Processing Computer (PPC) system located in the control room for monitoring.~~

~~II.G.2.a. — The maximum temperature for used oil in vessel #R201 is 550° F.~~

~~II.G.2.b. — Pressures in vessel #R201 shall not exceed 7 psi.~~

~~II.G.3. — Vessel #R201 is limited to a maximum volume of 3,000 gallons of oil.~~

~~II.G.4. — Vapors in vessel #R201 flow through the Oil Vapor Condenser (OVC) and any recovered product oils are the pumped into tank #120.~~

~~II.G.4.a. — After the OVC, the primary vapor line then splits into two secondary vapor lines that feed fuel into the FPH. Each secondary vapor line has a pressure valve (PV1 and PV2) installed upstream of the FPH.~~

~~II.G.4.b. — At start up of the processing system, both the PV1 and PV2 valves shall remain in the closed position until vapor pressure in the primary vapor line is equal to or exceeds 0.5 psi. Pressure readings from both valves shall be connected to the PPC system in the control room.~~

~~II.G.5. — The vapors in the secondary lines are used as supplemental fuel to fire the FPH or they~~

~~alternately are burned in the Vapor Combustor (VC). The VC secondary system is located on the west side of the tank farm and is used to burn vapors from vessel #R201 when the FPH is not operational.~~

~~H.G.5.a. The Permittee shall operate the VC at a minimum operating temperature of 1000° F when in operation.~~

~~H.G.5.b. The Combustor Knock Out Tank (CKT) is located immediately upstream of the VC, and removes any additional condensate prior to burning in the VC.~~

H.H. — Description and Operation of the Wiped Film Evaporator

~~H.H.1. The Wiped Film Evaporator is an oil distillation system that further refines the oil received from vessel #R201. The Hot Oil Heater (HOH) provides an indirect heat source for the WFE.~~

~~H.H.1.a. The oil temperature in the WFE may not exceed 680° F under a negative pressure.~~

~~H.H.2. Oil distilled and condensed in the WFE then flows into tank #WFE1. The oil then flows through a filter and is pumped into tank #117. The processed oil in tank #117 may be filtered through a clay filtration system prior to transfer into tanks #115 or #116.~~

~~H.H.3. The heavier oil distillation bottoms, generated during processing in the WFE, drain into tank #WFE2 and then into tank #114. The Permittee markets the distillation bottoms as feedstock to manufacture asphalt products and thus material in tanks #114 and #WFE2 are not subject to the regulatory requirements of R315-15 or the Administrative Code.~~

~~H.H.4. Vapors generated in the WFE are pulled through a vacuum unit that discharges to the vapor space in vessel #R201.~~

II.I.G. General Description Finishing Clay Filtration Systems

~~II.I.G.1. The oil in tank #117 may be processed through the Granular Clay Filtration (GCF) system, and the Rotary Drum Clay Filtration (RDCF) ~~or the Finishing Clay Filtration (FCF)~~ system to remove any remaining contaminants in the oil. The filtered VGO is pumped directly into used oil transportation vehicle on the loading dock.~~

~~II.I.G.2. The Permittee shall have written procedures for the operation, shut down and the disposal of waste generated for each of the clay filtration systems.~~

~~II.I.G.3. The GCF system is comprised of up to 150-60 vertical clay filled columns aligned in parallel or a series. All vapors generated from the burn down clay cleaning cycle are piped into the heating of the VGO ~~are vented to the Vapor Combustor, system for burning.~~~~

~~II.I.G.3.a. The GCF columns burn down clay cleaning cycle shall operate at a maximum operating temperature is of 1000 °F, ~~with a maximum external column temperature of 325° F.~~~~

~~II.I.G.4. The RDCF system mixes VGO with clay to form a slurry, which adheres to the exterior wall of a rotary drum. The filtered VGO is pumped directly into used oil~~

transportation vehicle on the loading dock, into either tank #115 or tank #116. The spent clay is scraped off the exterior wall during processing and the resulting material is collected and properly characterized and disposed.

~~II.I.5. The FCF system is located next to tank #115 and is comprised of a series of small clay bag filters.~~

II.H. Plant Processing Computer (PPC) System

II.H.1. The Plant Processing Computer (PPC) system shall record (electronically) all critical operating parameter data at a minimum of every 15 minutes. The PPC’s electronic log data shall be stored at the facility for a minimum of one year and be available for review by the Director upon request.

II.H.2. The control room operator shall manually record every 30 minutes the process temperatures (i.e. thermocouples, oil, and VC), pump flow rates and the oil levels in the processing tanks in the control room’s Process Log Sheets. The Process Log Sheets shall be maintained in the facility operating record until closure of the facility.

II.H.3. Operators shall also record any upset conditions that occur while processing oil and the actions taken by the operator to resolve the issue in the Operation Logbook. The Operation Logbook shall be maintained in the facility operating record until closure of the facility.

II.H.4. The Permittee shall have written operational procedures which document operational parameters for equipment used to process the oil. A copy of the operating procedures shall be maintained in Control Room.

II.H.5. The required emergency alarms (PPC system) that trigger shutdown of all processing equipment (automatic or manual), partial shutdown and other actions required are listed below in Table II.H.5.

Table II.H.5: Required Emergency Alarms and Responses

<u>Alarm</u>	<u>Alarm Response</u>
<u>VC Low Temperature (< 1000° F)</u>	<ol style="list-style-type: none"> <u>1. Operator shall adjust the ratio of gas to O₂ to increase the temperature in the VC.</u> <u>2. If the minimum operating temperature remains < 1000° F for longer than 15 minutes the operator shall initiate plant shutdown as follows:</u> <ol style="list-style-type: none"> <u>a. Shutdown Vapor Feed: Close valves V102, V103 on vapor line R1 and valve V107 on Vapor Line R3</u> <u>b. Stop oil feed into R202, R201 and the WFE</u> <u>c. Shutdown UOH, HOH and R202 Burner</u> <u>d. Shutdown WFE</u>

<p><u>VC High Temperature</u> (<u>> 1750° F</u>)</p>	<ol style="list-style-type: none"> 1. <u>The Operator shall adjust the ratio of gas to O² and/or the oil feed rate into R201 to reduce temperature in the VC.</u> 2. <u>If the minimum operating temperature remains > 1750° F for longer than 15 minutes the operator shall initiate plant shutdown as follows:</u> <ol style="list-style-type: none"> a. <u>Shutdown Vapor Feed: Close valves V102, V103 on vapor line R1, valve V101 on Vapor Line R2, and V107 on Vapor Line R3</u> b. <u>Stop oil feed into R202, R201 and WFE</u> c. <u>Shutdown UOH, HOH and R202 Burner</u> d. <u>Shutdown WFE</u>
<p><u>R202 High Temperature</u> (<u>> 270° F</u>)</p>	<ul style="list-style-type: none"> • <u>Operator shuts down R202 burner</u>
<p><u>High Pressure Tanks R202 and R201</u></p> <ol style="list-style-type: none"> 1. <u>> 5 psi and < 8 psi</u> 2. <u>> 8 psi and ≤ 9 psi</u> 3. <u>> 9 psi</u> 	<ol style="list-style-type: none"> 1. <u>≥ 5 psi and < 8 - Operator cuts oil feed rate 50%</u> 2. <u>> 8 psi and < 9 - Operator cuts oil feed rate 99%</u> 3. <u>> 9 psi - Operator shall initiate plant shutdown as follows:</u> <ol style="list-style-type: none"> a. <u>Shutdown Vapor Feed: Close valves V102, V103 on vapor line R1, valve V101 on Vapor Line R2 and V107 on Vapor Line R3</u> b. <u>Stop oil feed into R202, R201 and WFE</u> c. <u>Shutdown UOH, HOH and R202 Burner</u> d. <u>Shutdown WFE</u>
<p><u>High Temperature R201</u></p> <ol style="list-style-type: none"> 1. <u>@ 475° F</u> 2. <u>@ 525°</u> 	<ol style="list-style-type: none"> 1. <u>@ 475° F - Operator shall inspect the UOH for any electronic or mechanical issues</u> 2. <u>@ 525° F - Operator manual shuts down UOH</u>
<p><u>High Temperature Combustor Feed Elbows</u></p> <ol style="list-style-type: none"> 1. <u>Vapor line R1</u> 2. <u>Vapor Line R2</u> <p>(<u>> 600° F</u>)</p>	<ol style="list-style-type: none"> 1. <u>Operator closes vapor line R1 valve V102</u> 2. <u>Operator close Vapor Line R2 valve V101</u>
<p><u>WFE System</u></p> <ul style="list-style-type: none"> • <u>loss of cooling water</u> • <u>loss of wiper rotor</u> • <u>loss of vacuum</u> • <u>loss of heat</u> 	<ol style="list-style-type: none"> 1. <u>Operator initiates shutdown of the WFE System:</u> <ol style="list-style-type: none"> a. <u>Shutdown HOH</u> b. <u>Shut valve V106 to stop oil feed from R201</u> c. <u>Shut down wiper rotor if still in operation</u>

II.KI. Used Oil Storage Inspections

II.KI.1. The Permittee shall conduct weekly inspections of used oil processing equipment tanks, auxiliary equipment, storage, tanks/containers, and secondary containment systems in accordance with Attachment 2 (Safety, Security, and Inspection Forms) of this Permit. The Permittee shall record the inspector’s name, the time and date of the inspection, the condition of the tanks and storage containers and the secondary containment systems. The Permittee shall document in the inspection log any issues

discovered during the inspections (e.g. leaking tanks or water accumulation) and any actions taken by the Permittee to resolve these issues.

II.LJ. Used Oil Loading and Unloading Requirements

II.LJ.1. The Permittee shall ensure that operations involving the loading or unloading of used oil are conducted in accordance with Attachment 7 (Used Oil Loading and Unloading Procedures).

II.MK. Used Oil Sampling and Analysis

II.MK.1. The Permittee shall collect a representative sample from tanks, totes, drums or other containers in accordance with Attachment 5 (Used Oil Sample Collection Procedures). Sampling personnel shall be trained on appropriate sampling methods for each type of container and matrix.

II.MK.2. Samples collected from bulk oil containers greater than 550 gallons shall be individual samples, not composite samples.

II.MK.3. A representative composite sample may be collected from individual drums or containers containing used oil from the same source. A representative composite sample may consist of not more than four drums/containers or 550 gallons, whichever is less, per composite sample. The individual samples shall be taken and consolidated into one representative composite sample (Attachment 5 – Sample Collection Procedures) and tested.

II.MK.4. Drums or containers of used oil from different sources or processes shall be sampled individually.

II.MK.5. A COLIWASA shall be used to collect samples from drums or containers less than or equal to 275 gallons. The entire COLIWASA contents shall be placed in one sample container.

II.MK.6. The Permittee shall analyze used oil and other related materials in accordance with the requirements of Attachment 6 (Analysis Plan).

II.NL. Used Oil Training

II.NL.1. The Permittee shall train handlers of used oil in accordance with R315-15 ~~of the Utah Administrative Code~~ UAC and the requirements of this Permit. New employees may not manage or process used oil without a trained employee present until used oil training is completed.

II.NL.2. Employee training shall include documentation that the following topics were covered: identification of used oil, recordkeeping requirements and facility used oil procedures for handling, transporting, sampling and analysis, emergency response, spill reporting and personal safety.

II.NL.3. The Permittee shall provide, at a minimum, an annual used oil-training refresher course for employees handling used oil. Additional training is required if the Permittee changes used oil handling procedures.

- II.NL.4. The Permittee shall keep training records for each employee for a minimum of three years. Employees and supervisors shall sign and date training attendance sheets to document class attendance.
- II.NL.5. Employees collecting and performing field halogen testing shall be trained and shall demonstrate competence in collecting a representative used oil sample and testing for halogens using a CLOR-D-TECT® kit prior screening used oil.

II.OM. Facility Closure

- II.OM.1. The Permittee shall implement the closure plan in Attachment 8 (Facility Closure Plan) to evaluate the potential impacts of used oil operations on the surrounding soil, groundwater, and surface water in accordance with R315-15-11 ~~of the Utah Administrative Code~~UAC. The Permittee shall also be responsible for any cleanup of any used oil contamination that has migrated beyond the facility property boundaries in accordance with R315-15-11(d) ~~of the Utah Administrative Code~~UAC.

II.PN. Emergency Spill Response and Remediation

- II.PN.1. In accordance with R315-15-9.1 ~~of the Utah Administrative Code~~UAC, the person responsible for the spill shall immediately take appropriate action to minimize the threat to human health and the environment.
- II.PN.2. The Permittee shall notify the DEQ Hotline at (801) 536-4123 if the spill is greater than 25 gallons or smaller spills if it poses a threat to human health or the environment (Attachment 3 – Emergency Controls and Contingency Plan).
- II.PN.3. Responders shall take action to prevent spills from spreading by utilizing absorbent, dirt, booms, pads, rags, etc.
- II.PN.4. The Permittee is responsible for the material released and shall recover oil and remediate any residue from the impacted soils, water, or other property, or take any other actions as required by the Director until there is no longer a hazard to human health or the environment.
- II.PN.5. Once the material is containerized, a waste determination shall be made to determine the material's disposition.
- II.PN.6. The Director may require additional cleanup action to protect human health or the environment.
- II.PN.7. All costs associated with the cleanup shall be at the expense of the Permittee.
- II.PN.8. Spill kits shall contain, at a minimum, the equipment listed in Table II.Q of this Permit.

Table II.P: Spill Kit Equipment Requirements

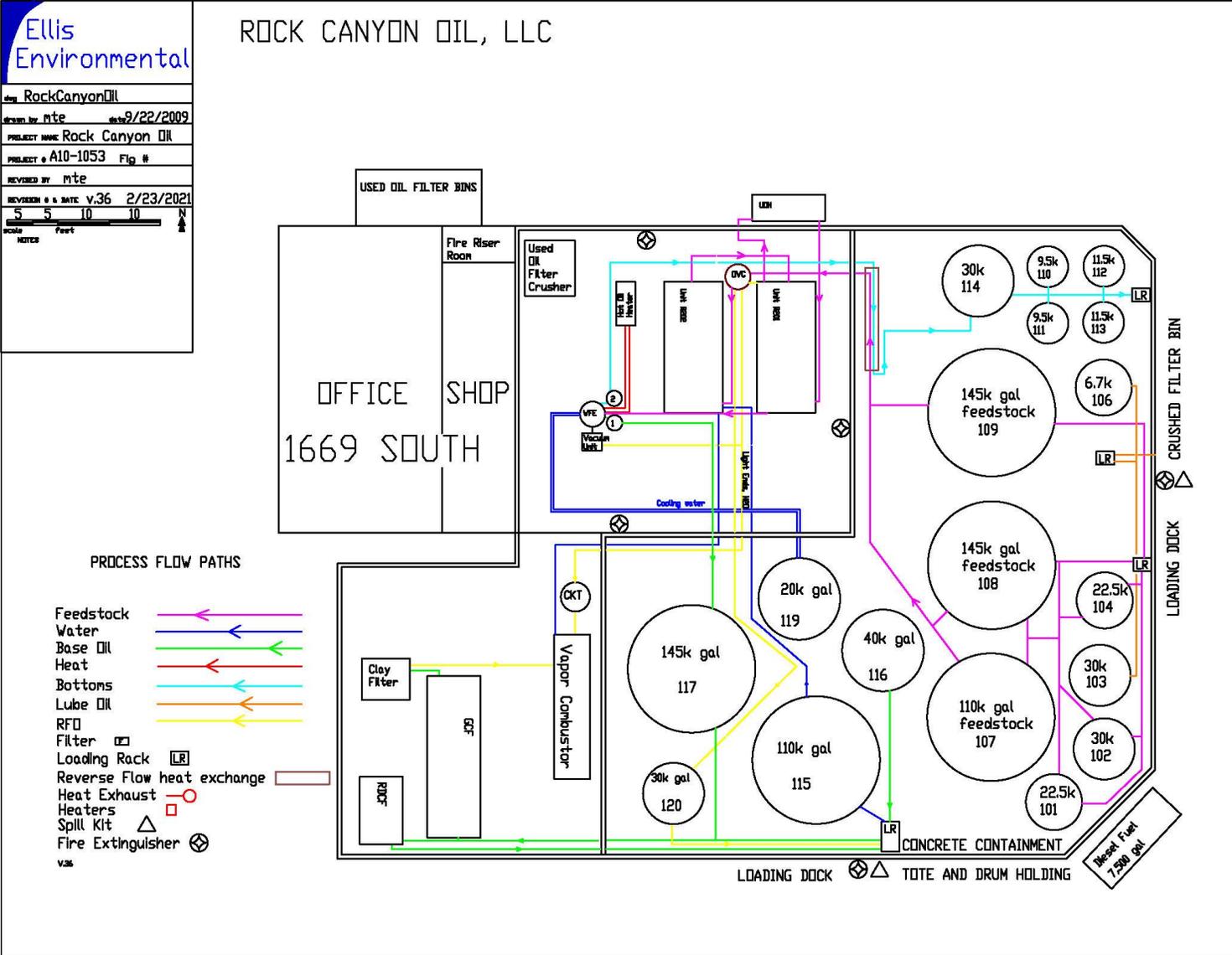
Equipment Description	Quantity
Shovel	1
Buckets	1
Spill Pad	10
Granulated Absorbent	2 ft ³
Boom/Oil Socks	1
Spill Plan with Emergency Contact Numbers	1
Blank Spill Report Sheets	2

II.PN.9. The Permittee shall report all relevant information, including the amount of waste generated from cleanup efforts, the characterization of the waste (i.e. hazardous or non-hazardous), final waste determination and disposal records. The report shall also include actions taken by the Permittee to prevent future spills.

II.PN.10. In accordance with R315-15-9.4 of the [Utah Administrative Code UAC](#), the Permittee shall submit to the Director a written report within 15 days of any reportable release of used oil.

Draft Permit for Public Comment

Attachment 1
Facility Site Plan Map



Attachment 2

Safety, Security and Inspection Forms

A. Purpose

- A.1. Rock Canyon Oil LLC shall assure the protection of human health and the environment at this facility by operating in a safe manner and meeting all regulatory requirements for the maintenance and inspection of R315-15 of the Utah Administrative and this Permit.
- A.2. The Facility Site Plan Map (Attachment 1) shows the location of the used oil storage areas and of emergency equipment.

B. Inspections

- B.1. Rock Canyon Oil LLC shall document the inspection and maintenance of used oil tanks, fire suppression systems (portable and fixed), and facility emergency equipment. Rock Canyon’s facility manager is responsible for the implementation of the inspection program.
- B.2. Inspectors shall document inspections using the Storage and Handling Area (Appendix 1) and the Safety/Emergency Equipment (Appendix 2) inspection forms when conduction weekly inspections. Inspection forms may consist of either a written hardcopy or an equivalent electronic record.
- B.3. The facility's operating record will incorporate the inspection records (associated documents), actions taken by the facility to remedy any deficiencies identified during the inspection.
- B.4. Table B specifies the minimum frequency of the inspections of used oil storage areas and the facilities emergency equipment.

Table B: Frequency of Used Oil Inspections

Inspection Type	Items Inspected	Frequency
Use Oil Storage Areas	Tanks Auxiliary equipment/piping/valves Secondary Containment Area	Weekly
Emergency Equipment	Spill Kits Fire Extinguishers and the Fixed Fire Suppression Systems Communication Systems, Alarms, Personal Safety Equipment First Aid Kits	Weekly

- B.5. The inspector shall document the status of each inspected item and any problems found that require corrective action. All inspectors shall record the time/date of the inspection and initial the inspection document the time of the inspection.
- B.6. Inspectors shall notify the facility manager of any deficiencies found during inspections. The facility manager shall document in the operating record the corrective actions taken to correct any reported problems.
- B.7. Inspectors shall receive training to enable them to identify any problems associated with the used oil storage areas or emergency equipment.

Draft Permit for Public Comment

Attachment 2 - Appendix 1
Inspection Form for Storage and Handling Areas

Rock Canyon Oil Used Oil Processor Facility Used Oil Storage and Handling Areas Weekly Inspection Form					
Equipment	Inspection Elements	Status		If "Not OK" State Reason	Date Corrected (Initials)
		OK	Not OK		
Tanks	Check tanks for signs of deterioration				
	Check any tank valves, any piping				
	Check that tanks are properly labeled				
	Check that tank valves are secure				
Secondary Containment Areas	Check concrete for deterioration				
	Check for oil in secondary containment areas				
	Check for water in secondary containment area				
Loading and Unloading Areas	Check for used oil spills.				
Used Oil Hoses	Check used oil hoses for deterioration.				
Comments:					
Inspection Date: _____		Inspector's Signature: _____			

Attachment 2 – Appendix 2
Inspection Form for Safety/Emergency Equipment

Rock Canyon Oil Used Oil Processor Facility Safety/Emergency Equipment Weekly Inspection Form					
Equipment	Inspection Elements	Status		If “Not OK” State Reason	Date Corrected (Initials)
		OK	Not OK		
Spill Kits	Inventory sheet with spill kit				
	Verified all listed supplies are included				
First Aid Kits	Check for presence of First Aid Kit				
	Check First Aid Kit inventory and stock any items removed from kit (check against inventory sheet)				
Fire Extinguishers	Check fire extinguisher tags for expiration dates. Have fire extinguishers inspected if expired.				
	Check pressure gauges for adequate pressure				
Communication/ECCP	Check communication systems and alarms				
	Check that a copy of the Emergency Controls and Contingency Plan (ECCP) is available for employees				
Fencing	Check perimeter fencing for deterioration				
	Check gate locking mechanism is in working order				
Comments:					
Inspection Date: _____		Inspector’s Signature: _____			

Attachment 3

Emergency Controls and Contingency Plan

A. Introduction

A.1. Rock Canyon Oil, LLC’s (Rock Canyon) Emergency Control and Contingency Plan is designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of used oil to air, soil, or surface water in accordance with the requirements of the Utah Administrative Code UAC R315-15-5.3 and this Permit. Rock Canyon also will implement the applicable response required by Rock Canyon’s SPPC Plan in the event of an emergency. The SPPC plan is not incorporated into this Permit.

B. Facility Description and Operations

B.1. Rock Canyon processes/refines recyclable used oil into marketable recycled fuels and lubricants. Rock Canyon oil maintains sufficient secondary containment for stored and processed used oil as required by R315-15-5 of the Utah Administrative Code UAC, and this Permit.

C. Site Security

C.1. The facility operates up to 24 hours a day. A chain-link fence surrounds the tank farm and the vehicle loading and unloading area. Access to the facility is restricted to employees and authorized visitors.

D. Commitment of Manpower and Resources

D.1. The facility shall have an emergency coordinator at the facility or on call that is available to respond to a facility emergency immediately. Table D listed the primary and secondary emergency coordinators for the facility. The emergency coordinators shall be thoroughly familiar with all aspects of the facility’s emergency control and contingency plan, facility operations, and have the authority to commit the resources needed to carry out the contingency plan. In their absence, all facility personnel will evacuate to the sidewalk on the west side of the office building and the most senior employee will contact the emergency coordinators.

Table D: Facility Emergency Coordinators and Contact Information

Emergency Coordinators	Title	Contact Information
Gary Maxwell	General -Manager	Cell: (801) 420-1640 Email:gary@rockcanyonoil.com
Jay Kirchoff	Plant Manager	Cell: (801) 787-6950

E. Facility Emergency Equipment

E.1. The facility is equipped with the emergency equipment listed in Table E. To assure its proper operation in time of emergency, Rock Canyon shall inspect and properly maintain emergency equipment.

Table E: List of Facility Emergency Equipment

Physical Description	Capabilities/Use
Spill Kit	Spill containment
Fire extinguishers	Extinguish fires, dry chemical type
First aid kit	Treat minor injuries
Hard hats, safety glasses, <u>and goggles,</u> <u>and face shields</u>	Personal Protection
Communications systems	Emergency Calls

F. Communication

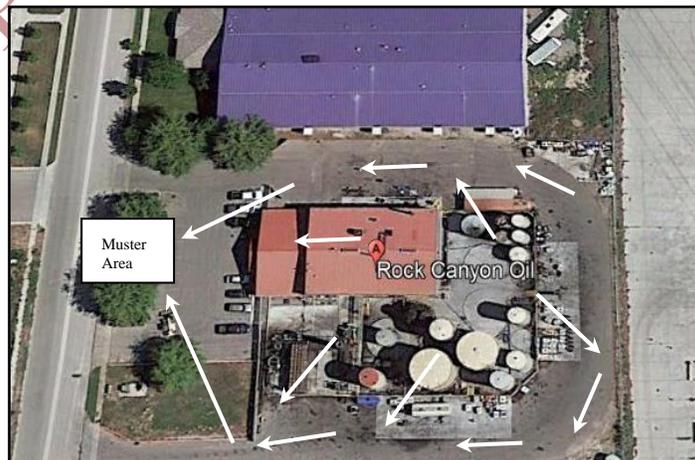
F.1. In the event of an emergency or used oil spill, employees will use cell phones and in-person verbal communication to notify employees of the emergency and any need to evacuate, and also to contact the supervisors and emergency coordinators, and provide details regarding the emergency or spill event.

G. Facility Emergency Evacuation Plan

G.1. In the event of a serious spill, fire, or explosion, which presents possible hazards to human health and to the environment, all personnel will immediately evacuate the premises in accordance with the following procedures.

G.2. Employees shall muster on the sidewalk on the west side of the office building (Figure G: Emergency Evacuation Route Diagram).

Figure G: Emergency Evacuation Route Diagram



H. Coordination Agreements

- H.1. A copy of the Emergency Control and Contingency Plan and all revisions will be sent to the government agencies and prime emergency responders. A copy of the plan will be maintained onsite.
- H.2. The fire department is familiar with the facility layout, products transferred, stored, and handled, and waste stored.

I. Spill Control, Emergency Response and Reporting Requirements

- I.1. Rock Canyon shall immediately cleanup any spill which occurs during the loading or unloading of used oil at the facility.
- I.2. The operator shall call 911 when warranted to summon emergency personnel to the scene.
- I.3. The operator shall take action to prevent the spilled material from spreading by utilizing absorbent, dirt, booms, pads, rags, etc. The operator should prevent used oil from entering any adjacent storm water drain, sewer drain system or leaving the facility boundary.
- I.4. ~~In the event that~~If more resources are required, the operator will contact a supervisor to dispatch a spill response team to help facilitate the mitigation and/or remediation of the spill.
- I.5. Used oil spills exceeding 25 gallons, or smaller quantities that pose a risk to human health and the environment, shall be reported to Rock Canyon’s management and to the Utah Department of Environmental Quality immediately after containment of the spill (Table I.5). The report must follow the reporting requirements of R315-15 and Rock Canyon’s Processor Permit. Within 15 days after any release of used oil that is reported under R315-15-9 ~~of the Utah Administrative Code~~UAC, the person responsible for the material at the time of the release shall submit to the Director a written report in accordance with the reporting requirements of R315-15-9 ~~of the Utah Administrative Code~~UAC.

Table: I.5: List of Agencies to Notify in Case of a Spill

Agencies Notification	Contact Phone Number
National Response Center (if applicable)	(800) 424-8802
Utah Department of Environmental Quality (within 24 hrs.)	(801) 536-4123

- I.6. Rock Canyon’s operators shall submit a completed spill report (Attachment 3, Appendix 1 - Rock Canyon Spill Report Form) to a supervisor at or before the end of the operators shift.
- I.7. Rock Canyon’s employees shall report any spills to plant manager (Table ~~D.I.7—Spill Reporting and Emergency Contacts~~), regardless of the volume ~~with the exception of~~except for de minimis spills that are immediately cleaned up by the responsible employee.

Attachment 3 - Appendix 1: Rock Canyon Spill Report Form

Part A: Discharge Information		Name of Employee Reporting Spill:	
<u>General information when reporting spill to outside agencies</u>		Type of oil:	Discovery date and time:
Name: Rock Canyon Oil, LLC.	Address: 1660 South 580 East American Fork, Utah 84003	Total quantity released:	Discharge date and time:
Telephone: (801) 420-1640			
Owner/Operator: Rock Canyon Oil, LLC 1660 South 580 East American Fork, Utah		Location/Source:	Affected media: <input type="checkbox"/> Soil <input type="checkbox"/> Surface Waters <input type="checkbox"/> Storm Drain <input type="checkbox"/> Sewer/POTW <input type="checkbox"/> Other
Primary Contact: Plant Manager Jay Kirchoff Cell (24 hrs.): (801) 787-6950			
Nature of discharges, environmental/health effects, and damages:			
Actions taken to stop, remove, and mitigate impacts of the discharge:			
Part B: Notification Log			
Discharges of any Amount	Date and Time	Name of Person Receiving the Call	
Discharges Exceeding 25 gallons	Date and Time	Name of Person Receiving the Call	
American Fork Fire Department/Other 911			
Utah Department of Environmental Quality (801) 536-4123			
Other Notification Information:			

Attachment 4
Piping and Instrument Diagram

A. General

A.1. The Piping an Instrument Diagram is a proprietary document and is available for Division review at the Permittees facility upon request.

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Attachment 5

Sample Collection Procedures

A. General

- A.1. Rock Canyon operators shall adhere to sample collection procedures in this attachment to assure a representative sample is collected from tanks or containers.

B. Lock Down Procedures for Tanks 107, 108 and 109

- B.1. Used oil in tanks 107, 108 and 109 must meet the specification requirements of R315-15 ~~of the Utah Administrative Code~~ UAC prior to transfer into vessel ~~R201~~ R202.
- B.2. The operator shall “lock down” the tank valve so that used oil cannot be added or removed from the tank. The operator shall record in the operating record the time the tank valve was locked out and current volume of used oil in the tank at the time of sampling. A representative sample will be collected from the tank and sent to a Utah certified laboratory for analysis.
- B.3. The operator may remove the lock on the tank after the plant manager has reviewed analytical data from the sample event. The operator shall record the time the lock was removed and the volume of oil transferred into vessel ~~#R201~~ R202 in the operating record.

C. Tank Sampling Procedure (Recirculation Method)

C.1. Step 1

Lock down the tank valve. Circulate (mixing pump on tank) the guard tank for approximately 5-10 minutes. Unlock the sample port and open the valve and collect the sample in a sample jar. Wipe off sample port with absorbent pad, place the cap back on the sample port and lock the cap.

C.2. Step 2

Label the sample jar with the date and time sample was collection, tank number, and the name of the individual collecting the sample and a unique sample number. Package and send the sample to a Utah certified laboratory for analysis.

D. Drums/Containers \leq 275 gallons Sampling Procedure

- D.1. Sampling Method ASTM D7831 shall be followed when sampling drums/containers \leq 275 gallons.

D.2. Step 1

A COLIWASA Sampling Device: Glass or Polypropylene/ plastic type tube shall be used to collect samples from drums/containers.

D.3. Step 2

Open the COLIWASA by placing the stopper mechanism or inter tube in the open position.

D.4. Step 3

Lower the tapered end of the outer sampling tube in the liquid at a rate that allows the liquid level inside and outside to the tube to equalize. If the level of the liquid in the

sample tube is lower than that outside the sampler, the sampling rate is too fast and a non-representative will result.

D.5. Step 4

Use the stopper or tube mechanism to close the COLIWASA when it has reached the desired depth.

D.6. Step 5

Slowly withdraw the sample from the liquid, keeping the seal closed and holding the tube in a vertical position. Wipe the exterior of the sampler tube with a rag or allow the excess liquid to drain back into the container.

D.7. Step 6

Open sample jar and dispense the entire contents from COLIWASA into sample jar.

D.8. Step 7

Label the sample jar with the date and time sample was collection, tank number, and the name of the individual collecting the sample and a unique sample number.

Package and send the sample to a Utah certified laboratory for analysis or screen sample the sample with a CLOR-D-TECT® halogen test kit (EPA Method 9077) and document the results. Follow any required laboratory procedures for proper packing and shipping.

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Attachment 6
Analysis Plan

A. Halogen Field Screening Methods

A.1. The Permittee shall screen, when applicable, used oil or oily water subject to R315-15 of the Utah Administrative Code UAC in accordance with the following requirements:

A.1.a. CLOR-D-TECT® halogen test kit (EPA Method 9077) for oil containing less than 20% water; or

A.1.b. HYDROCLOR-Q® test kit if the oil contains between 20% and 70% water using the following conversion formula:

$$\text{True Halogen Concentration} = \text{Reading Syringe} + [(10 + \text{ml oil in sample})/10]$$

Example: sample contains 6 ml water and 4 ml oil (60% water) and the syringe reading is 2,000 ppm, then the true concentration is:

$$2,000 \text{ ppm} [(10 \text{ ml} + 4 \text{ ml})/10] = 2,800 \text{ ppm}$$

A.1.c. HYDROCLOR-Q test kit without correction for oil containing greater than 70% water.

B. Quality Control Sample

B.1. A The CLOR-D-TECT® kit (Method 9077 of SW846) requires that a quality control sample (duplicate) be analyzed for each sampling event.

C. Halogen Laboratory Analytical Methods

C.1. When relying on laboratory testing, the Permittee shall submit a representative used oil sample to a Utah-certified laboratory to analyze for total halogen concentrations using Method 9076.

D. Rebuttable Presumption

D.1. The Permittee may rebut the hazardous waste presumption in accordance with R315-15-4.5 of the Utah Administrative Code UAC if the Permittee can demonstrate that the used oil does not contain significant concentrations of any of the halogenated hazardous constituents listed in Appendix VIII of EPA CFR 40, Part 261 that includes volatiles, semi-volatiles, PCBs, pesticides, herbicides and dioxin/furans. Generator knowledge may be used to exclude testing for pesticides, herbicides and dioxins/furans unless coming from a process where this is expected.

E. PCB Contaminated Used Oil

E.1. Laboratory testing for PCBs shall be conducted in accordance with R315-15-18(d) of the Utah Administrative Code UAC when used to satisfy any requirements of R315-15 of the Utah Administrative Code UAC and this Permit.

E.2. Table E lists the required PCB sample preparation and analytical methods.

Table E: PCB Sample and Preparation and Analytical Methods

Sample Preparation Methods	Analytical Method	Analytes *	
		PCB CAS RN	PCB Aroclor®
3500C (General) 3580A (Preparation) 3665A (Cleanup)	8082A	12674-11-2	1016*
		147601-87-4	1210
		151820-27-8	1216
		11104-28-2	1221*
		37234-40-5	1231
		11141-16-5	1232*
		71328-89-7	1240
		53469-21-9	1242*
		12672-29-6	1248*
		165245-51-2	1250
		89577-78-6	1252
		11097-69-1	1254*
		11096-82-5	1260*
		37324-23-5	1262
11100-14-4	1268		
<p>* Note: <u>The total concentration of A total of seven of the Aroclors® Aroclor® 1016, Aroclor® 1221, Aroclor® 1232, Aroclor® 1242, Aroclor® 1248, Aroclor® 1254, and Aroclor® 1260 shall be determined for each sample. specified in the list below shall be analyzed which will include Aroclor® 1016, Aroclor® 1221, Aroclor® 1232, Aroclor® 1242, Aroclor® 1248, Aroclor® 1254, and Aroclor® 1260, and any other Aroclor suspected to be in a specific type of oil.</u></p>			

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Attachment 7

Used Oil Loading and Unloading Operations

A. Training

- A.1. Rock Canyon's drivers and other personnel who may assist with these operations will be trained in these procedures prior to loading and unloading used oil at the processor facility.

B. Location of Loading and Unloading Operations

- B.1. Bulk and containers of used oil may be unloaded or loaded at two locations along the perimeter of the tank farm.
- B.2. During loading and unloading operations, a trained operator shall remain at the transfer location and maintain control of the operations throughout the entire used oil transfer.

C. Procedures

- C.1. Park the truck in the unloading area and place chocks under the wheel.
- C.2. Hook up hoses and transfer bulk oil into the appropriate tank/vehicle or place incoming drums in the drum storage areas.
- C.3. Empty any buckets placed under hose connections to capture used oil and clean up any used oil spills.
- C.4. Fill in the required information in the Oil Transfer Log book to document the amount of incoming or outgoing used oil at the facility.

Attachment 8

Facility Closure Plan

A. General

- A.1. The Permittee shall comply with the cleanup and requirements of R315-15-5 UAC and this Closure Plan (Attachment 8).
- A.1.a. The Permittee shall submit an updated closure plan (Attachment 8 - Conditions B through D) to the Director for review and approval after operations cease and prior to implementation of closure activities.

B. Soil and Groundwater Testing (Task 1)

- B.1. The Permittee shall collect soil and groundwater samples to determine potential contamination from operational activities.
- B.2. The Permittee shall analyze each sample for the presence of RCRA 8 metals, Volatiles, Semi-Volatiles and PCBs.
- B.3. The Permittee shall submit a Level IV data validation analytical package from a Utah certified laboratory, within 30 days of receipt, to the Director for review and approval.
- B.4. Additional sampling and remediation costs may be accrued at time of closure.
- B.5. Soil Samples
- B.5.a. Twenty-two soil samples based on the 95% probability of detecting soil contamination using a 30 ft. by 30 ft. sampling grid over the secondary containment areas, unload/loading areas and 25% of the processing building are required.
- B.6. Groundwater Samples
- B.6.a. Four groundwater samples based on the 95% probability of detecting groundwater contamination using a 70 ft. by 70 ft. sampling grid over the secondary containment areas and the unload/loading areas with one sample collected beneath the processing building.

C. Plant Decommission Certification (Task 2)

- C.1. Plant decommission, at time of closure, requires removal of all used oil. Other media shall be recovered from all containers and any other ancillary equipment.
- C.2. The Permittee shall dispose of used oil at an appropriately permitted management facility.
- C.3. Hazardous waste, non-hazardous waste, rinsate water, and scrap metal generated shall be transported to a recycling facility or a waste disposal facility as applicable.

D. Closure Certification Costs (Task 3)

- D.1. Closure of the facility in accordance with requirements of this Permit shall be verified by a Utah certified independent Professional Engineer (P.E.), and submitted to the Director for final approval. Table D below lists the estimated closure costs.

Table D: Itemized Tasks Costs and Final Financial Assurance Cost

<u>Task 1 Description</u>	<u>Quantity</u>	<u>Units</u>	<u>Rate</u>	<u>Cost</u>
<u>Sample Collection (Labor)</u>	<u>10</u>	<u>Hours</u>	<u>\$78.00</u>	<u>\$750.00</u>
<u>Sampling (labor) Supervisor</u>	<u>10</u>	<u>Hours</u>	<u>\$83.00</u>	<u>\$800.00</u>
<u>Drilling Soil Sample Collection</u>	<u>10</u>	<u>Hours</u>	<u>\$182.00</u>	<u>\$1,750.00</u>
<u>Soil (22)/Groundwater (4) Sample Laboratory Analytical Costs</u>	<u>26</u>	<u>Each</u>	<u>\$572.00</u>	<u>\$14,300.00</u>
<u>Task 1 - Soil and Groundwater Testing Sub-Total</u>				<u>\$18,318.00</u>
<u>Task 2 Description</u>	<u>Quantity</u>	<u>Units</u>	<u>Rate</u>	<u>Cost</u>
<u>Removal, Transportation, Sale and/or Recycling of Used Oil</u>	<u>835,840</u>	<u>Gallons</u>	<u>\$0.08</u>	<u>\$66,867.00</u>
<u>Disposal of used oil filters</u>	<u>10</u>	<u>Drum</u>	<u>\$111.00</u>	<u>\$1,114.00</u>
<u>Disposal of Drums (empty)</u>	<u>1</u>	<u>Truck Load</u>	<u>\$416.00</u>	<u>\$416.00</u>
<u>Tanks(s) Cleaning/Decontamination</u>	<u>21</u>	<u>Each</u>	<u>\$1,066.00</u>	<u>\$17,052.00</u>
<u>Tanks Rinsate Heel/Sludge/Solids</u>	<u>3600</u>	<u>Gallons</u>	<u>\$2.00</u>	<u>\$7,081.00</u>
<u>Tank Rinsate Oily Water</u>	<u>6900</u>	<u>Gallons</u>	<u>\$1.00</u>	<u>\$5,673.00</u>
<u>Diesel Fuel for Rinsate</u>	<u>775</u>	<u>Gallons</u>	<u>\$3.00</u>	<u>\$2,250.00</u>
<u>Rinsate Analytical (4) (Composite Samples)</u>	<u>4</u>	<u>Each</u>	<u>\$546.00</u>	<u>\$2,186.00</u>
<u>Steam Cleaning Concrete and Rinsate Disposal</u>	<u>1</u>	<u>Each</u>	<u>\$3,122.00</u>	<u>\$3,122.00</u>
<u>Clean Auxiliary Equipment and Dispose of Rinsate (OVC, HOH, FCF, UOH, OFC and CKT)</u>	<u>1</u>	<u>Each</u>	<u>\$4,163.00</u>	<u>\$4,163.00</u>
<u>Incineration of Transformer Oil > 2 ppm and <50 ppm and PCB Tank Decontamination Rinsate</u>	<u>11,500</u>	<u>Gallons</u>	<u>\$0.50</u>	<u>\$5,750.00</u>
<u>Disposal PCB contaminated PPE and Rags (2 drums) (PPB <50 ppm)</u>	<u>600</u>	<u>lbs.</u>	<u>\$0.65</u>	<u>\$390.00</u>
<u>Heavy Equipment for Contaminated Soil Removal</u>	<u>1</u>	<u>Each</u>	<u>\$1,500.00</u>	<u>\$1,500.00</u>
<u>Contaminated soil removal (Labor)</u>	<u>5</u>	<u>Hours</u>	<u>\$78.00</u>	<u>\$390.00</u>
<u>Contaminated Soil Removal (Supervisor)</u>	<u>5</u>	<u>Hours</u>	<u>\$83.00</u>	<u>\$416.00</u>
<u>Transportation and Disposal of oil Contaminated soil</u>	<u>27</u>	<u>Tons</u>	<u>\$52.00</u>	<u>\$1,405.00</u>
<u>Task 2 - Plant Decommission Sub-Total</u>				<u>\$119,838.00</u>
<u>Task 3 Description</u>	<u>Quantity</u>	<u>Units</u>	<u>Rate</u>	<u>Cost</u>
<u>Independent P.E. Verification</u>	<u>1</u>	<u>Each</u>	<u>\$2,500.00</u>	<u>\$2,500.00</u>
<u>DWMRC Review</u>	<u>30</u>	<u>Hour</u>	<u>\$110.00</u>	<u>\$4,400.00</u>
<u>Task 3 -Closure Verification Sub-Total</u>				<u>\$6,900.00</u>
<i>Sub-Total Tasks 1, 2 and 3</i>				<i>\$145,054.00</i>
<i>Closure Contingency Costs (10 %)</i>				<i>\$14,505.00</i>
<u>Total Financial Assurance Closure Cost</u>				<u>\$159,559.00</u>

Task 1 Description	Quantity	Units	Rate	Cost
Sample Collection (Labor)	10	Hours	\$75.00	\$750.00
Sampling (labor) Supervisor	10	Hours	\$80.00	\$800.00
Drilling Soil Sample Collection	10	Hours	\$175.00	\$1,750.00
Soil (22)/Groundwater (4) Sample Laboratory Analytical Costs	26	Each	\$550.00	\$14,300.00
Task 1 – Soil and Groundwater Testing Sub-Total				\$17,600
Task 2 Description	Quantity	Units	Rate	Cost
Removal, Transportation, Sale and/or Recycling of Used Oil	871093	Gallons	\$0.08	\$69,687.44
Disposal of used oil filters	10	Drum	\$107.00	\$1,070.00
Disposal of Drums (empty)	1	Truck Load	\$400.00	\$400.00
Tanks(s) Cleaning/Decontamination	21	Each	\$1,024.00	\$21,504.00
Tanks Rinsate Heel/Sludge/Solids	3600	Gallons	\$1.89	\$6,804.00
Tank Rinsate Oily Water	6900	Gallons	\$0.79	\$5,451.00
Diesel Fuel for Rinsate	775	Gallons	\$2.79	\$2,162.25
Rinsate Analytical (4) (Composite Samples)	4	Each	\$525.00	\$2,100.00
Steam Cleaning Concrete and Rinsate Disposal	1	Each	\$3,000.00	\$3,000.00
Clean Auxiliary Equipment (Clay Filtration Systems, Oil/water Centrifuge and Condenser/Knock-out Tanks & Rinsate Disposal	1	Each	\$4,000.00	\$4,000.00
Incineration of Transformer Oil \geq 2 ppm and $<$ 50 ppm and PCB Tank Decontamination Rinsate	11500	Gallons	\$0.15	\$1,725.00
Disposal PCB contaminated PPE and Rags (2 drums) (PPB $<$ 50 ppm)	600	lbs.	\$0.65	\$390.00
Heavy Equipment for Contaminated Soil Removal	1	Each	\$1,500.00	\$1,500.00
Contaminated soil removal (Labor)	5	Hours	\$75.00	\$375.00
Contaminated Soil Removal (Supervisor)	5	Hours	\$80.00	\$400.00
Transportation and Disposal of oil Contaminated soil	27	Tons	\$50.00	\$1,350.00
Task 2 – Plant Decommission Sub-Total				\$121,919
Task 3 Description	Quantity	Units	Rate	Cost
Independent P.E. Verification	1	Each	\$2,000.00	\$2,000.00
DWMRC Review	30	Hour	\$100.00	\$3,000.00
Task 3 – Closure Verification Sub-Total				\$5,000.00
<i>Sub Total Tasks 1, 2 and 3</i>				<i>\$144,519</i>
<i>Closure Contingency Costs (10%)</i>				<i>\$14,452</i>
Total Financial Assurance Closure Cost				\$158,971